

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2005/003800

A. CLASSIFICATION OF SUBJECT MATTER

INV. F02D13/02 F02D41/40 F02D35/02 F02D35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
F02D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 266 957 B1 (NOZAWA MASAET ET AL) 31 July 2001 (2001-07-31) column 1, line 46 - column 2, line 49; figure 5	1,7
A	EP 1 167 734 A (NISSAN MOTOR CO., LTD) 2 January 2002 (2002-01-02) paragraphs [0011] - [0013]; figure 1	1,7
A	US 5 293 741 A (KASHIYAMA ET AL) 15 March 1994 (1994-03-15) column 1, line 37 - column 2, line 41; figure 6	1,7
A	US 2002/062800 A1 (SHIMIZU HIROKAZU) 30 May 2002 (2002-05-30) paragraphs [0007] - [0010]; figures 2-4	1,7



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

11 April 2006

Date of mailing of the international search report

19/04/2006

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Vedoato, L

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2005/003800

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6266957	B1	31-07-2001	DE 19913316 A1 JP 3521790 B2 JP 11336574 A	16-12-1999 19-04-2004 07-12-1999
EP 1167734	A	02-01-2002	DE 60114932 D1 JP 2002004913 A US 2001056322 A1	22-12-2005 09-01-2002 27-12-2001
US 5293741	A	15-03-1994	NONE	
US 2002062800	A1	30-05-2002	JP 2002161770 A	07-06-2002